



GEOARCHAEOLOGY OF WWII AIRCRAFT IN NEW MEXICO, USA



Adrian P. Hunt

INTRODUCTION

- A large number of aircraft crashes occurred in NM during WWII (1941-1945)
- Located throughout the state in different geologic settings



GEOLOGY & WWII AIRCRAFT INCIDENTS

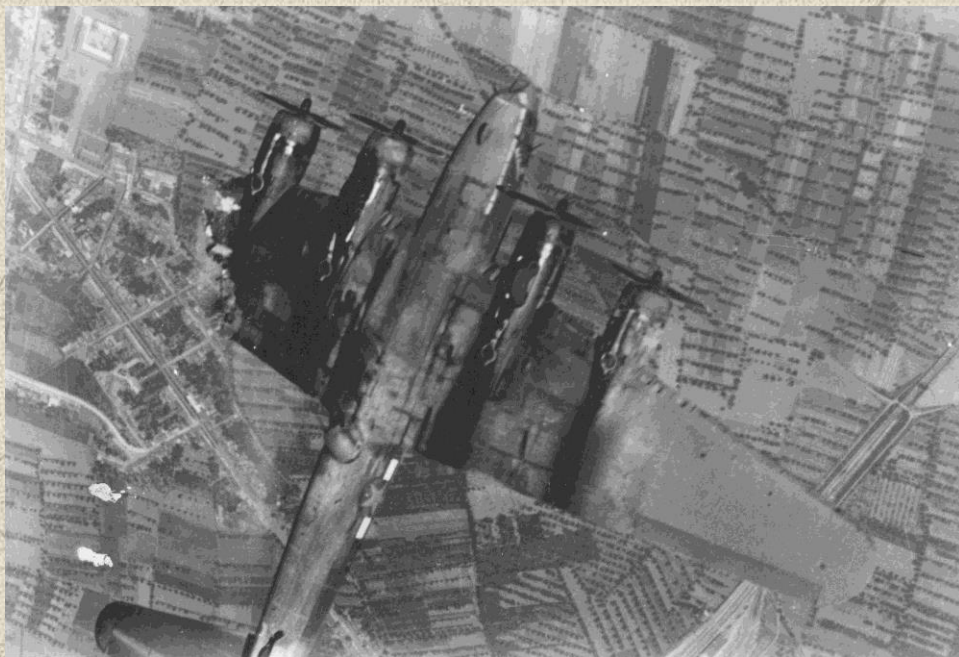
- Crash site location
 - Mountains
 - Weather
 - Instruments
 - Training
 - Pilot error
 - Airfield location
 - Base of mountain front
 - Adjacent terrane

GEOLOGY & WWII AIRCRAFT INCIDENTS

- Preservation
 - Topography
 - Climate



RAINING PLANES



US National Archives

VOLUME OF LOSS

Aiicrew losses

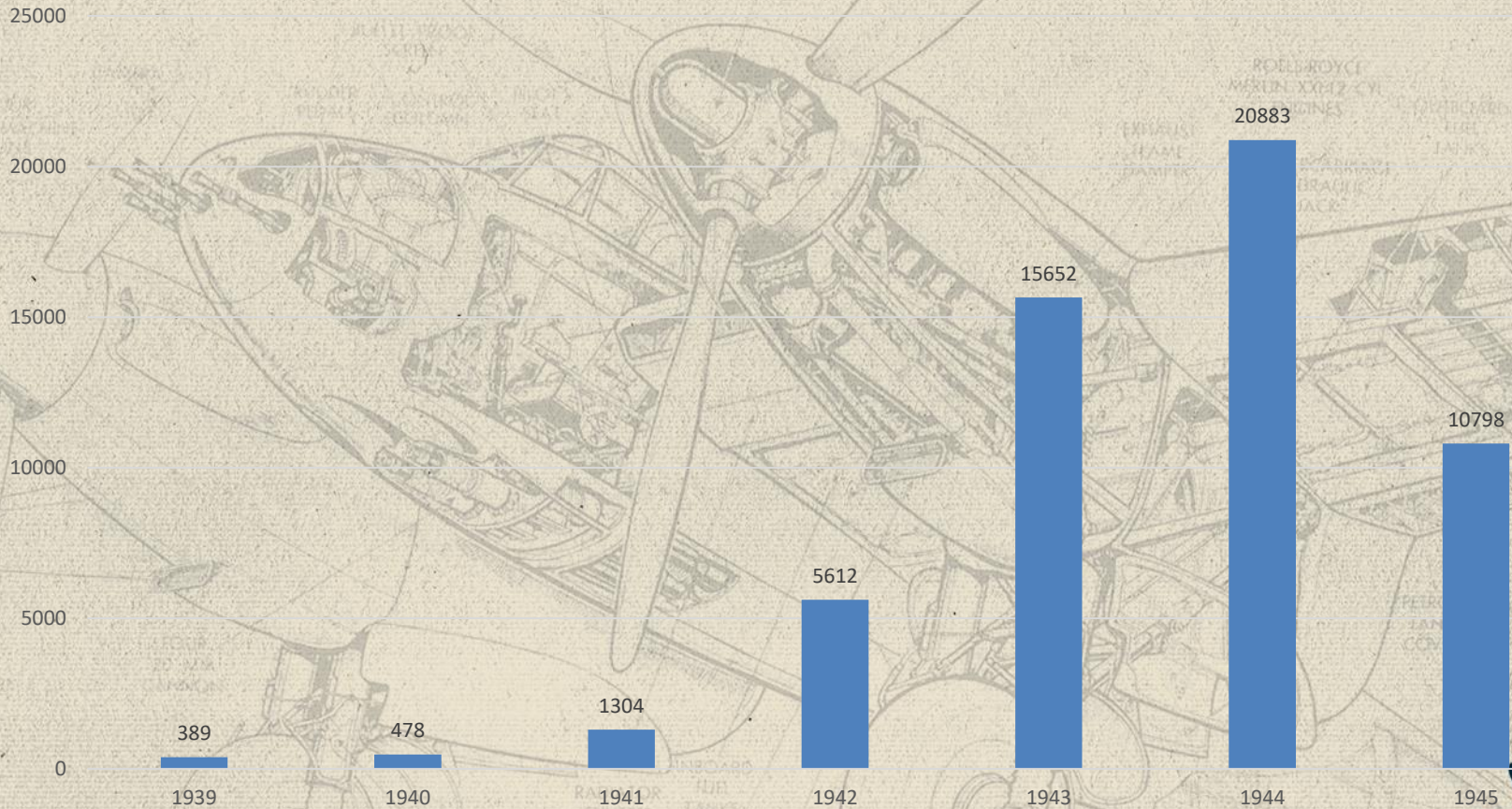
- USAAF – 52,173 deaths KIA, 35,396 other
- USN – 3,618 KIA, 8,515 other

Plane losses

- USA - >4,500 planes lost in Pacific War

USAAF AIRCRAFT ACCIDENTS IN USA

USAAF ACCIDENTS IN USA – 55,116

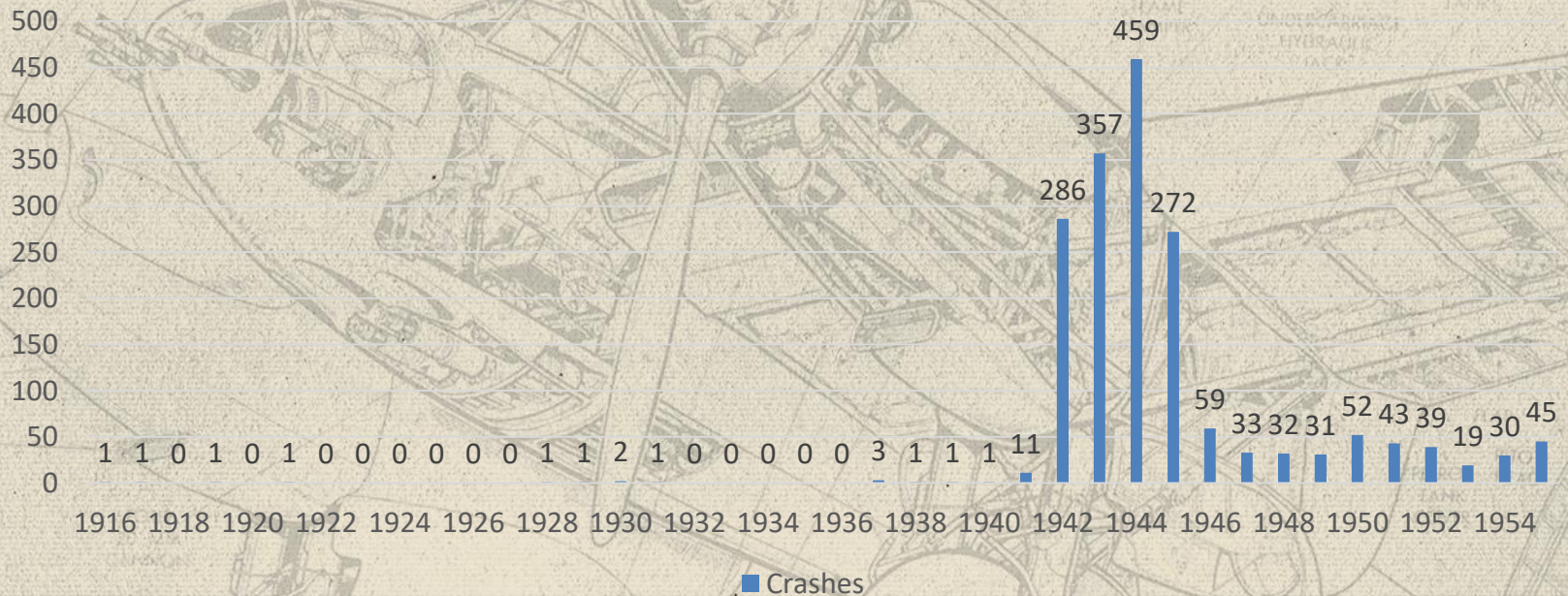


TRAINING ACCIDENTS IN USA

Year	USAAF Wrecks in USA	Fatalities
1939	86	52
1940	100	90
1941	228	199
1942	1,259	1,096
1943	3,854	4,209
1944	5,387	5,616
1945	3,264	3,799
TOTAL	14,197	15,041

AIRCRAFT CRASHES IN NEW MEXICO

Aircraft Crashes in New Mexico, USA



WWII AIR BASES IN NM

- After Pearl Harbor, need several thousand air crew trained per month
- Training all over US
- CA-AZ-NM-TX preferred
 - Climate: flying days
 - Geology
 - Only locally mountainous
 - High altitude
 - Broad analogy to Pacific: mountain “islands”?

WWII AIR BASES IN NM

- Second Air Force
 - Alamogordo AAF
 - Clovis AAF
 - Kirtland AAF
- Army Air Forces Training Command
 - Carlsbad AAF
 - Deming AAF
 - Fort Sumner AAF
 - Hobbs AAF
 - Roswell AAF

AIRFIELD ACCIDENTS

- Large number of largely non-fatal (and some fatal) crashes occurred at/near airfields
- 115 incidents from 1942-1945 at Alamogordo Army Air Field

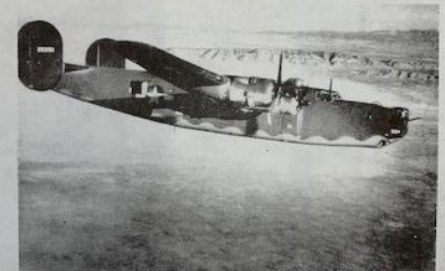


“ROUTINE TRAINING FLIGHT”

The Legacy of World War II Aircraft Training Accidents at
Alamogordo Army Air Field, New Mexico

by
Matthew Vandiver
and
William B. Boehm

With a Contribution by
Martyn D. Tagg

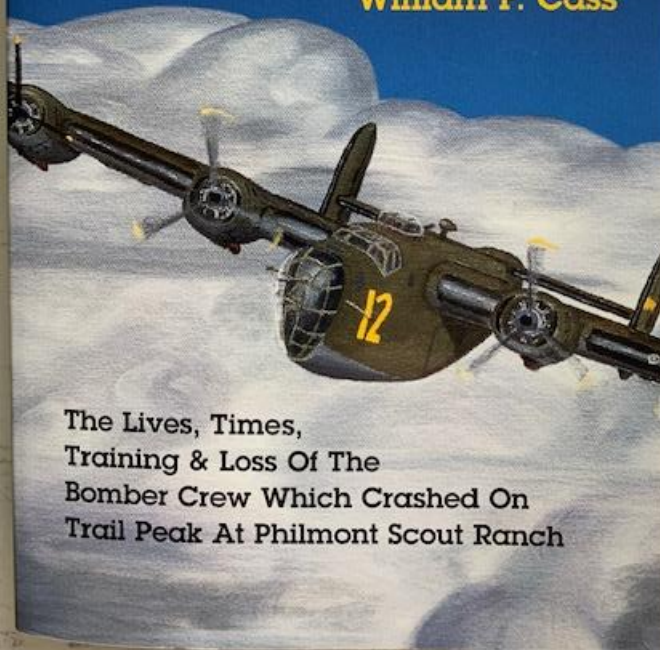


Holloman Air Force Base
Cultural Resources Publication No. 7

Trail Peak B-24

THE LAST FLIGHT of LIBERATOR 41-1133

William F. Cass



The Lives, Times,
Training & Loss Of The
Bomber Crew Which Crashed On
Trail Peak At Philmont Scout Ranch



Trail Peak B-24

- April 22nd 1942
- B-24D Liberator
- Bad weather, one engine off.....
- Trail Peak near Cimarron - Philmont Scout Ranch.



Trail Peak B-24



41-1133 | Copyright by Zane Adams | 2008-07-28 | Airport-Data.com

<https://www.summitpost.org/trail-peak-nm/583413> <https://line.17qq.com/articles/cqtwcwtcx.html>

North Baldy Peak B-17



- [Wikipedia](#)

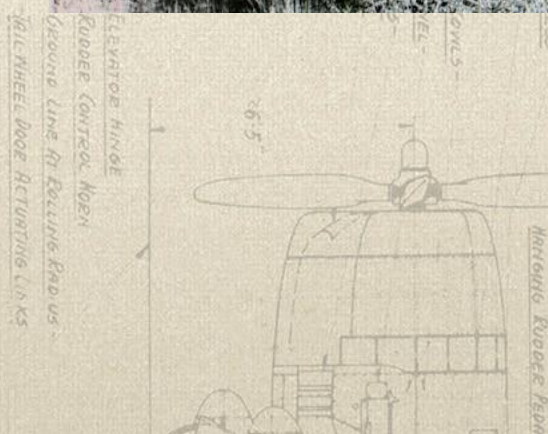
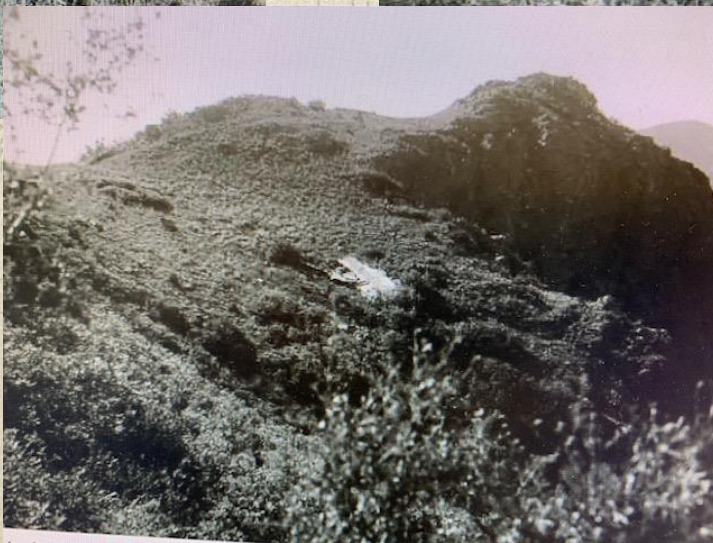


North Baldy Peak B-17

- October 15th 1942
- B-17E Flying Fortress
- Night flight training
- Struck North Baldy Peak near Magdalena
- 75 feet below summit
- Pilot error?



North Baldy Peak B-17



http://socorro-history.org/HISTORY/PH_History/200701_b17.pdf



El Malpais OA-10



- National Museum of USAF



El Malpais OA-10

- August 1st, 1945
- USAAF Consolidated OA-10 (Army name for Navy PBY-5A Catalina flying boat)
- P-51 Mustang near Tucumcari reports engine smoke
- Crashed in El Malpais NM
- Feathered one propeller (indicating engine failure)



El Malpais OA-10



Other losses

- Crashes in diverse terranes all around NM – Great Plains, Rio Grande Rift etc.
- Small number of crashes were terrane independent
 - aircraft disintegrated at altitude
 - B-17F east of Rio en Medio on January 1st, 1943
 - B-17E on August 23rd 1942 near Las Cruces
 - Mid-air collisions
 - Cessna AT-17 and an AT-17B on January 10th 1943 near Roswell



SUMMARY

- About 1400 aircraft crashes in NM 1941-1945
- Geologic factors influence:
 - Location
 - preservation
- Large dataset for analysis and provide model